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ORANGE COUNTY AMATEUR RADIO CLUB

VOL. XXX NO. 1

P. O. BOX 3454, TUSTIN CA 92681

JANUARY 1989

SPEAKERS

TRAFFIC

FIELD DAY

POOL PARTIES

BREAKFASTS

CONSTRUCTION

PACKET

PIZZA PARTIES

EMERGENCY PREPAREDNESS

TECHNICAL

CONVENTIONS

JOIN THE CLUB



1989 CLUB BOARD of DIRECTORS

President	Frank Smith	WA6UKZ	730-7142
Vice President	John Roberts	WA6LAB	540-7368
Secretary	Bob Tegel	KD6XO	531-0926
Treasurer	Mark Stanford	KJ6JC	991-7398
Activities	Ken Konechy	W6HHC	541-6249
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T.V.I. Chairman	Bob Eckweiler	AF6C	639-5074
Member at Large	Ron Toering	KB6EZP	971-5180
Member at Large	Kei Yamachika	W6NGO	538-8942

CLUB APPOINTMENTS

Club Historian	Bob Evans	WB6IXN	543-9111
W6ZE Trustee	Bob Eckweiler	AF6C	639-5074
R.F. Editor (Act.)	Bob Eckweiler	AF6C	639-5074
Teen Representative	<open>		

CLUB FUNCTIONS

MONTHLY MEETING:

Jan 20th

3rd Friday of each month, 7:30PM at:
MERCURY SAVINGS & LOAN
1095 Irvine Blvd., (4th. Street)
Tustin, CA. Talk-in on 146.55 MHz

Feb 17th

(Exit the 55 FWY at 4th St. go east.
Continue for two short blocks beyond
Newport Blvd. It's on the left.)

CLUB BREAKFAST:

Feb 4th

1st Saturday of each month, 8 AM at:
LE GRAND CAFE
2525 N. Grand Avenue
Santa Ana, CA. (714) 997-5393
(1-1/2 blocks south of the 22 FWY)

Mar 4th

CLUB NETS

<u>BAND</u>	<u>MODE</u>	<u>DAY</u>	<u>LOCAL TIME</u>	<u>FREQ MHz</u>	<u>SPLIT</u>	<u>PL</u>	<u>OPERATOR</u>
2 Meters	FM	Wednesday	2100 hrs.	146.550	simlx	na	W6HHC
15 Meters	SSB	Wednesday	2000 hrs.	21.375*	simlx	na	WB6IXN
15 Meters	CW	Thursday	2000 hrs.	21.175*	simlx	na	KB6NAX
			(Listen for W6ZE, net control)	XPlus or minus QRM			

ARES DISTRICT NETS

2 Meters	FM	Monday	1900 hrs.	146.220	-600	1A	N6HQI	1
2 Meters	FM	Monday	~1915 hrs.	145.340	-600	42	WA6UKZ	2

1 - ARES Info net. 2 - ARES District 3 net starts after info net is completed (Usually about 1915 hrs.).

THE PREZ SEZ

Well, a happy and prosperous New Year to all.

Thanks to last year's Board and club members, the club is well set financially. We had a great Field Day last year, again thanks to all. Emergency communications has taken a large step forward during the past year.

This year's Board won't have the opportunity to expand our Treasury as had last year's Board, but this year's Board shall have the opportunity to improve on last year's Field Day and to organize, coordinate, and expand the ARES/RACES program in Orange County.

I heartily encourage all club members to volunteer for ARES/RACES participation, as many organizations need emergency communications. A few that come to mind are your local city, the American Red Cross, and Adopt-A-School Program.

Hopefully our club can have some fun field exercises with simulated emergency communications.

73's

Frank B.
WA6VKZ

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JANUARY PROGRAM

EARTHQUAKE PREPAREDNESS

The guest speaker at the January OCARC meeting will be Ken Walston, WA6ZEF. Ken is the Section Emergency Coordinator for the Orange Section. He will be speaking on Earthquake Preparedness and Amateur Radio.

When the "big one" comes many hams will be called on to aid their communities. They will provide, what will most likely be, the only source of communications during those critical few hours following the major tremor.

But, hams are no different than others in many ways. They have family, friends and jobs. Earthquakes give no known warning (yet!) The hams who have the communications skills and capabilities may be the ones that need to communicate first. "Blood is thicker than water" and hams, as well as many other emergency personnel, will want to know the condition of their family. Many of us will be away from home if the quake strikes during working hours. Knowledge of our family's welfare will help us carry out our civic duties more efficiently in a major emergency.

To achieve this capability requires prior planning!

Bob, AF6C

A Review of the... HEATHKIT ACTIVE ANTENNA

Living in urban California presents many challenges for hams. Two near the top of the list are eliminating interference and erecting effective antennas. Many articles have been written on indoor and disguised outdoor antennas for use where space and laws prevent installing an eighty-foot high tower with multiple yagis. But what antenna can a restricted ham use for that all-band receiver gathering dust in the corner of the shack?

One solution is the Heathkit HD-1424, 300 KHz to 30 MHz receive-only, Active Antenna. It is a small box (5.7 x 13 x 12.7 cm) with a collapsible whip antenna that extends to 63.5 cm (25 inches). Considering the size of this antenna its performance is amazing. One has been used for SWL-ing at AF6C, with a Collins 51J-4 receiver, for over a year now. It compares favorably with "long-wire" SWL antennas used in the past. As can be expected, there are some drawbacks to using an indoor active antenna, but sensitivity and overload immunity are good. Clear reception of commercial and foreign broadcast, weather FAX, WWV, ham and a multitude of other stations are possible when band conditions are favorable; just like with an outdoor antenna! The HD-1424 can also be used as a pre-amplifier for an external 50 ohm antenna when you finally get around to putting one up.

Normally, a short whip (sometimes referred to as a "probe antenna" when it is much shorter than the desired signal's wavelength) has a very high source resistance. If connected directly to the 50 ohm input of a receiver a voltage divider results, and only a tiny percentage of the signal reaches the receiver. Since the signal received by a short whip is weak to begin with, performance borders on terrible. If the antenna is connected to the receiver through low impedance coaxial cable, the shunt capacitance will attenuate the signal even more. An example is the typical AM car radio antenna. If you replace the special high impedance antenna cable with 75 ohm RG-59, you'll notice a marked drop in performance.

The secret of an active antenna is in the preamplifier stage(s) of the circuit. The HD-1424 uses two cascaded FET source follower amplifiers with an extremely high input impedance to more closely match the whip antenna. While these followers have a voltage gain less than one, the whip's impedance is transformed to a lower, more manageable, impedance. The output of the source followers is connected to a high gain bipolar amplifier that provides gain to improve the overall signal. A tuned circuit, with a five position band switch and tuning capacitor, peaks the front end of the first follower. Overall gain is adjustable by a front panel gain control.

As mentioned earlier, active antennas have some drawbacks. Since the HD-1424 is designed for indoor use, it is more susceptible to noise from appliances and fluorescent lights than an outdoor antenna; especially at lower frequencies. Degrading of the S/N ratio at higher frequencies, often evident on broad-band units, is minor on the HD-1424, but re-tuning is required whenever you change frequency by more than a few hundred KHz.

The HD-1424 runs off an internal 9 volt battery or an external (6 to 14 volt) supply. Half of its 45 ma power requirement is used for the "ON" LED. If you're using a battery you might want to change R109 from 390 ohms to 1.2K ohms to save battery life. I recommend an external wall transformer supply.

The Heathkit HD-1424 Active Antenna costs \$49.95. It assembles easily in a few hours with the aid of basic tools and Heathkit's famous manuals. If you're new to ham radio, and have never gotten into "construction", this is a good place to start!

73 de Bob, AF6C



COUNTY-WIDE 1988 FIELD FIELD SUMMARY
 by KEN/W6HHC (from KB6LJF via WB6YMH-2 PACKET BBS)

CLUB CITY	CALL	QSOS COUNTY	PWR	HAMS SECTION	POINTS#
CA 1 USA 2 SEC 1	HUGHES FULLERTON EMPLOYEE ASSOCIATION A.R.C. K6QEH (+KB6RXF) FULLERTON	3513 QSO'S ORANGE	150W 50	ORANGE	CLASS 3A 11,360 PTS
CA 2 USA 36 SEC 1	McDonnell Douglas Astro Amateur Radio Club W6VLD (+N6KOA) HUNTINGTON BEACH	2060 QSO'S ORANGE	150W 12	ORANGE	CLASS 2A 5,672 PTS
CA 9 USA 48 SEC 2	ORANGE COUNTY AMATEUR RADIO CLUB W6ZE (+WA6PFA) SANTA ANA	1494 QSO'S ORANGE	150W 36	ORANGE	CLASS 3A 4,362 PTS
CA 4 USA 30 SEC 2	ANAHEIM AMATEUR RADIO ASSOCIATION K6SYU ANAHEIM	1119 QSO'S ORANGE	150W 10	ORANGE	CLASS 4A 4,044 PTS
CA 1 USA 5 SEC 1	ASSOCIATED RADIO AMATEURS OF LONG BEACH W6RD LONG BEACH	1257 QSO'S LOS ANGELES	150W 47	LOS ANGELES	CLASS 9A 4,022 PTS
CA 2 USA 4 SEC 1	WEST COAST AMATEUR RADIO CLUB WT6Y SANTA ANA	1045 QSO'S ORANGE	150W 45	ORANGE	CLASS 8A 3,804 PTS
CA 8 USA 120 SEC 3	ROCKWELL AUTONETICS RADIO CLUB KI6X (+KB6EID) ORANGE	1002 QSO'S ORANGE	150W 18	ORANGE	CLASS 2A 3,662 PTS
CA 15 USA 103 SEC 5	DOWNEY AMATEUR RADIO CLUB W6TOI (+N6OPR) LA MIRADA	788 QSO'S LOS ANGELES	150W 67	LOS ANGELES	CLASS 3A 3,082 PTS
CA 17 USA 115 SEC 3	MORENO VALLEY AMATEUR RADIO ASSOCIATION WR6G (+KB6WSH) MORENO VALLEY	690 QSO'S RIVERSIDE	150W 65	ORANGE	CLASS 3A 2,900 PTS
CA 23 USA 159 SEC 5	FULLERTON RADIO CLUB W6ULI (+K6PHE) FULLERTON	790 QSO'S ORANGE	150W 28	ORANGE	CLASS 3A 2,376 PTS
CA 12 USA 75 SEC 3	BEACH CITIES WS K6MJ SAN JUAN CAPISTRANO	480 QSO'S ORANGE	150W 18	ORANGE	CLASS 4A 2,134 PTS
CA 25 USA 231 SEC 7	JAARS W6AN (+N6PVA) LOS ANGELES	389 QSO'S LOS ANGELES	150W 20	LOS ANGELES	CLASS 3A 1,522 PTS
USA 1 SEC 1	JOHN DAWSON, 731 N HANDY ST., ORANGE CA WA6RND ORANGE	155 QSO'S ORANGE	150W 1	ORANGE	CLASS 2B 1,110 PTS

WHO CAN YOU TRUST?

A person has been making the rounds of several ham clubs in the area in the past few months whom you should be made aware of. He runs a scam where he tries to sell a "DX amplifier" for guaranteed DX reception under poor conditions. Due to the nature of this story, the actual club names have been omitted.

He came into our local club one night at our regular meeting and introduced himself as John Smith, a visitor ham (probably not his real name). During the mid-meeting break he was with several of the more DX-oriented members discussing a device he had built and was considering patenting. He claimed it would allow DX QSO's even during poor band conditions.

The DX'ers countered with the opinion that nothing you can do on your end will improve the band. He disagreed, and finally they put up a wager of \$500 that with this device hooked onto the radio, they could talk to Europe on 80 meters at high noon. They all agreed to meet a few days later at the club station.

On the day of the appointment, several of us were there at the station ready to see if this would really work. At 11:45 am, Smith showed up carrying a small box. We went inside and we checked over the radio first, just to make sure nothing had already been "altered" or anything. We tuned it up onto 80 meters. The whole band was awash with atmospherics that time of day. We satisfied ourselves that it seemed on the level, and then we let Smith hook up his gadget.

It was in a small metal case, about 6" square and 4" tall, with three or four knobs and a meter on one side, and some coax connectors on the other end. It definitely looked homemade and not some kind of

commercial unit. He hooked it in between the transceiver and the tuner and adjusted the knobs, watching the meter as he did. He then turned to the man whom he had the wager with and said, "Go ahead, call CQ Europe and see who you get."

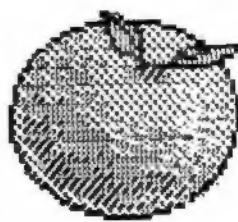
Our man Bob sat down at the mike and started calling, "CQ Europe, hello CQ CQ CQ Europe, from W6____, QR zed." He kept this up for a minute or two and turned and looked at Smith. "Nothing," he said, "not a peep."

Smith came back to the table and had him call CQ some more while making some more adjustments to his device. After some five minutes we called Smith's bluff and demanded settlement of the wager. Smith reluctantly paid the \$500, disconnected his gadget and left. We never saw him after that.

We thought that was the last we'd hear of him, except that a few days later we got a telephone call from the president of another ham club. Seems he'd had a fellow come in on one of the club meetings, and as we talked we all realized it was "John Smith" he was talking about, only the name given to this other club was "Mike Jones." So we asked what was the big deal?

Seems that this other club had also been taken by Smith. Smith had bet the other club's president \$1000 that he could make our club president call "CQ Europe" on 80 meters at noon!

Anonymous via WB6YMH-2



*** ON THE NETS ***

12/1 15m CW net - IXN checks in late & catches NG7D in conversation wid R.J. in Newport Beach. R.J. is developing a good fist! NG7D got his copy of 'RF', & TEJ still has work to complete at the 'meat market'. 12/7 15m phone net - W6ZE/IXN checks in NG7D, XO, & YZG. OPs discuss the Armenian Earthquake, 6.9 on the Richter scale. NG7D ant. problems wid SA winds still blowing! XO now questions his beam directions since the winds worked on his antenna! NG7D has licked his mike problem, & XO hears John FB as Bob tells abt coffee drinking & staying awake until 1 AM! YZG doesn't care for Nat. Geographic's new map, & Lu works the S. Orkney Islands on 14.243 MHz thru the IARU DX net. IXN is fighting a bout wid the flu! 12/7 2m net - W6ZE/RE checks in JSV, -BPX, YZG, & IMP. The wind causes static at IMP's QTH. BPX & YZG also spend time watching the SA wind move real estate! BPX worries abt damage to his avacado trees. YZG has been catching up on some reading. RE reads IMP at 88-9. JSV & RE discuss latest cable TV interference on Channel E, at RE's QTH. (JSV has the 800 number fer Dimension.) Dimension clears up the cable leak. JSV asks IMP to send 'RF' labels. IMP will drop them off at RE's & JSV will pick them up, edit the paper, & mail out Dec. 'RF'. RE plays Westlink tapes wid adr. fer QSL card frm Russian space station. (Special tnx to JSV fer a beautiful Dec. 'RF'!) 12/14 15m phone net - W6ZE/IXN checks in NG7D & YZG. John has been inside working on the 'house' fer the past few days. He got his new QSL cards (1000+). Low humidity causes NG7D & IXN skin problems. IXN is preparing his income tax data, & last week's wind blew down a ground plane radial ant YZG's QTH. Lu's XYL is hoping to have her arm cast removed, & Lu is attempting to avoid IXN's flu. He had his flu shots last week! 12/14 2m phone net - W6ZE/HHC checks in RE, IMP, YZG, & AF6C. RE has 1st meeting wid FHP doctors. COJ picks up RE's 2m handheld on Swapnet Mon. eve., fer an OP in Germany. Alex also informs group of Soviet emergency freqs. fer Armenian Earthquake. IMP broadcasts frm spa, & AF6C is learning that early to bed & early to rise will make him healthy, wealthy & wise! YZG & XYL will not attend Christmas party Fri. eve. And, RE has a copy of the ARRL proposed revision of Part 97 of the FCC rules fer amateur radio, fer anyone who wud like to see them. 12/15 15m CW net - W6ZE/IXN checks in TEJ & NG7D. R.J. works Brian, KN6J, in Corona del Mar on 2W QRP. And John discusses the 'ups & downs' of certain Radio Shack gear. IXN has a leak in the garage wid all the rain, & NG7D shingles (150 tiles) the roof of his 'doll house'. He will soon finish this Xmas project. All OPs have gud sigs tonite! TEJ will spread our net time among his friends, as he 'gets back to the steaks'! 12/28 15m phone net - W6ZE/IXN checks in NG7D, YZG, SDU, & N7HBI/mm 600 mi. south of San Diego on his way to Cabal San Lucas. OPs get their new HeathKit catalogues, & NG7D's 'small ones' loved the doll house he completed fer Xmas. IXN had a bladder infection 1 wk before Christmas, & YZG discovers that 'vet' bills can well exceed 'human' doctor bills! Lu's XYL is 'out of the cast' & in therapy now. SDU remembers NG7D frm Orange County Amateur Radio Grp dinner at El Toro last year. And HBI, Ted, is too weak here fer a gud phone patch! 12/28 2m phone net - W6ZE/HHC checks in IMP, BPX, RE, JSV, YZG & ex-WA2GUQ(AF6C). AF6C has modified an old Collins 51J4 general coverage receiver for SSB reception. He now needs a 1N270 diode! HHC has the week off, & he + XYL + harmonics motor arnd town observing Christmas lights, etc. IMP recruits members to help dismantle an ant. & tower this Sat. BPX is 'climbing' agn, & his electric shack heater just konked out during net! JSV & E2S experience the rigors of 12 deg. winter at the 6000 ft. level of the San Jacinto Mts. near Lake Hemet. 'Frozen pipes' bring back bad memories of cold N.E. winters to YZG, as JSV relates their experience! RE reads two ARRL bulletins & plays the Westlink tapes, after listening to the 'ringing telephone' in HHC's shack! 12/29 15m CW net - W6ZE/IXN checks in TEJ & RND. TEJ gets a new 'cuckoo clock' fer Christmas, & RND & XYL travel to Bishop fer a 'foot of snow' Xmas! RND also talks to old timer WA6BCY, Lucien Sirois, who might attend next meeting! TEJ asks fer a copy of Dec. 'RF'.

Compiled by: Bob, WB6IXN

AMATEUR RADIO LICENSE EXAMINATIONS - NOTICE 59, 01/05/89

The Greater Los Angeles Amateur Radio Group is a not-for-profit organization dedicated to the coordination of amateur radio license examinations at no charge to the examinee. Examination sessions are currently scheduled as follows:

SESSION - DATE - TIME - PLACE IN CALIFORNIA - PHONE FOR INFO

398	- JAN 14	- 0900	- LONG BEACH	- (213) 420 9480
432	- JAN 19	- 1830	- WHITTIER	- (213) 947 1356
436	- JAN 21	- 0900	- RANCHO PALOS VERDES	- (213) 644 2271
442	- JAN 21	- 0900	- BIG BEAR	- (714) 585 5069
399	- MAR 11	- 0900	- LONG BEACH	- (213) 420 9480
404	- MAR 12	- 0800	- LOMA LINDA	- (714) 796 0065
428	- MAR 18	- 0900	- HEMET	- (714) 925 3502
437	- MAR 18	- 0900	- RANCHO PALOS VERDES	- (213) 644 2271
443	- APR 15	- 0900	- BIG BEAR	- (714) 585 5069

For info regarding the group or the VEC program in general, phone (818) 892 2068 (after 6PM). On packet 145.050 @ GLAARG via KB6C-1 (FRA) or K6IYK-7 (CHAT05)

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Tustin, CA 92681

JANUARY 1989



FIRST CLASS MAIL